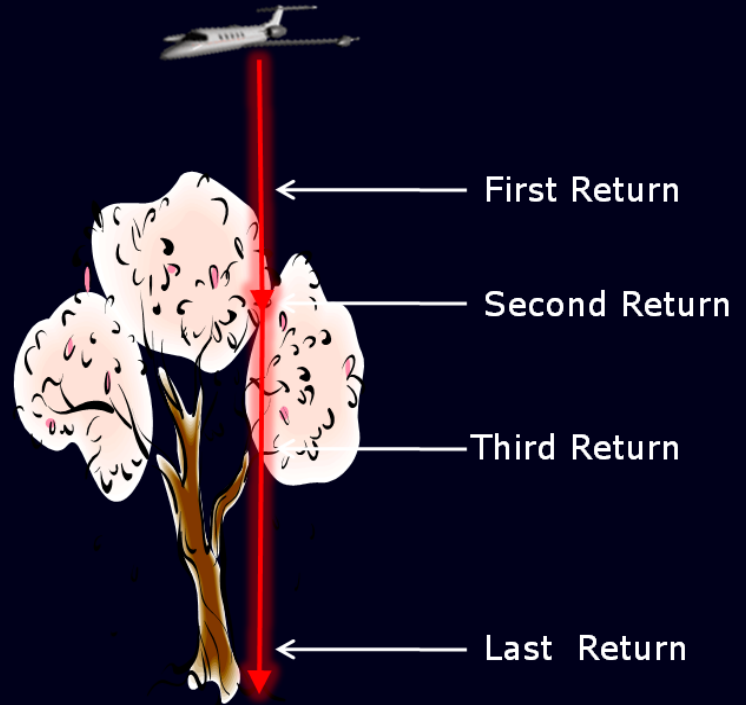
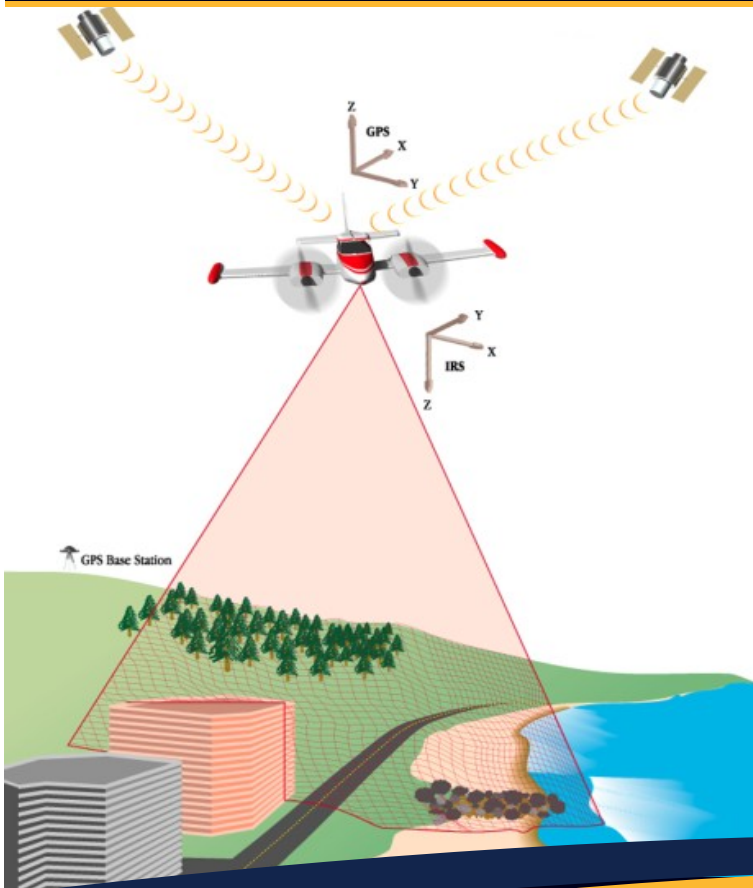


LiDAR ACQUISITION & MAPPING

AERIAL CARTOGRAPHICS OF AMERICA, INC.

"Going Beyond all Maps and Boundaries"

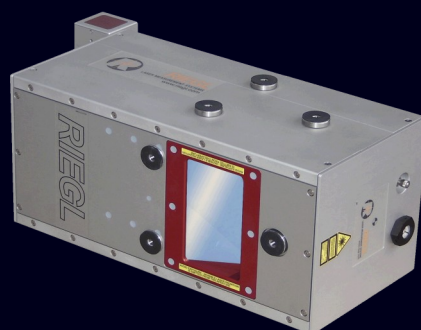


Light Detection and Ranging

ACA is among the nation's leading experts in LiDAR acquisition, processing, and mapping. Our licensed professionals have successfully completed major LiDAR projects, exceeding technical specifications and client expectations. ACA operates multiple airborne sensors to provide a broad range of high quality digital solutions that meet our customer's need for fast and accurate elevation data.

ACA provides advanced LiDAR mapping solutions using the latest Riegl LMS-Q680i 400Khz Full Waveform Sensor. LiDAR uses a laser sensor that transmits a near infrared laser

pulse from an aircraft at speeds up to 400,000 pulses a second. These measurements combined with ABGPS and the POS AV 510 provide horizontal and vertical points. The data when further processed provides a 3D surface model of the Ground, Vegetation, Tree Canopy, Structures and Roads.



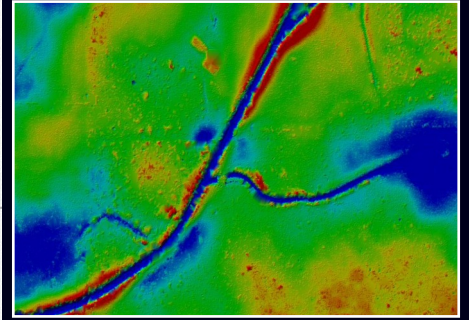
APPLICATIONS OF LiDAR

- Flood Plain Mapping
- Wetlands Management
- Coast Line Management
- Land Development
- Forest Inventory
- Urban 3D Modeling
- Cellular Network Design
- Mining /Volume Calculations
- Rail & Pipeline Corridor Design
- Transmission Line Design
- Solar/Wind Farm Design

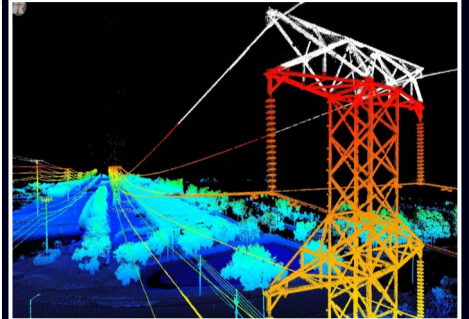
Simultaneous Collection LiDAR and Digital Imagery Coastal Regions



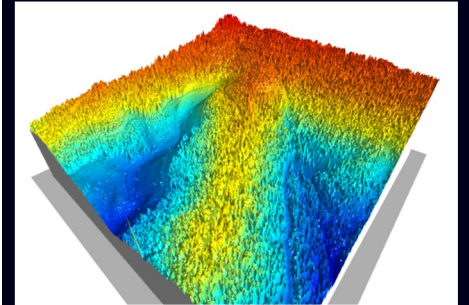
LiDAR Ground Points



Watershed Mapping/Hydro Modeling



Transmission Corridor Mapping



Forestry Management & Assessment



Digital Terrain Models & Land Development

ADVANTAGES

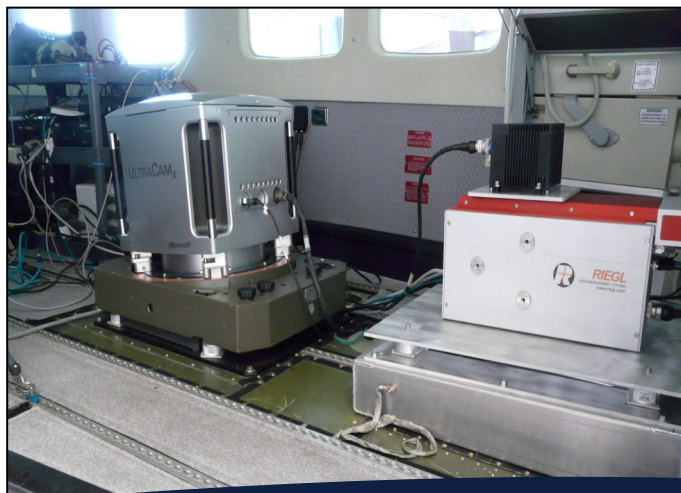
Overall Advantages of LiDAR

- Fast Acquisition of Surface Data: Helicopter or Fixed Wing LiDAR Acquisition
- Acquisition: Weather Flexible & Day/Night Independent
- Vegetation Penetration
- High Point Density of Ground Surface
- Lowest Cost for 3D Surface Modeling

Simultaneous Acquisition

ACA has pioneered the ultimate mapping solution using the most advanced LiDAR sensor and the Largest Format Digital Mapping Camera shown in the image below. This advanced solution provides superior results and will generate the most accurate 3D surface models and topographic maps vs. other technical approaches. The simultaneous data collection costs for a project can be greatly reduced while generating the best mapping results as shown in the above image.

The best classification of LiDAR data can be obtained when the UCX imagery is acquired with LiDAR using the same Airborne GPS positioning solution.



SIMULTANEOUS LiDAR & IMAGERY: Acquisition Sensor configurations ▶

WE ARE THE FULL DIGITAL SOLUTION FOR YOUR MAPPING AND GIS NEEDS



1722 West Oak Ridge Road , Orlando, FL 32809 , 407.851.7880 ph , 407.855.8250 fax www.aca-net.com

Aerial Cartographics of America, Inc.